

IN THE CLAIMS

Claims 1, 11, and 16 have been amended as follows.

This listing of the claims replaces all prior versions of the claims in the application.

1. (Currently Amended) An isolated polypeptide selected from the group consisting of:
  - a) polypeptide comprising an amino acid sequence of SEQ ID NO:11,
  - b) a polypeptide comprising a naturally occurring amino acid sequence having at least 90% sequence identity to an amino acid sequence of SEQ ID NO:11, said polypeptide stimulating DnaK ATPase activity, and
  - c) a biologically active fragment of a polypeptide comprising an amino acid sequence of SEQ ID NO:11, said fragment stimulating DnaK ATPase activity.
2. (Previously Presented) An isolated polypeptide of claim 1 comprising SEQ ID NO:11.
3. (Original) An isolated polynucleotide encoding a polypeptide of claim 1.
4. (Canceled)
5. (Previously Presented) An isolated polynucleotide of claim 3 comprising SEQ ID NO:22.
6. (Original) A recombinant polynucleotide comprising a promoter sequence operably linked to a polynucleotide of claim 3.
7. (Original) A cell transformed with a recombinant polynucleotide of claim 6.
8. (Canceled)
9. (Original) A method for producing a polypeptide of claim 1, the method comprising:

- a) culturing a cell under conditions suitable for expression of the polypeptide, wherein said cell is transformed with a recombinant polynucleotide, and said recombinant polynucleotide comprises a promoter sequence operably linked to a polynucleotide encoding the polypeptide of claim 1, and
- b) recovering the polypeptide so expressed.

10. (Withdrawn) An isolated antibody which specifically binds to a polypeptide of claim 1.

11. (Currently Amended) An isolated polynucleotide selected from the group consisting of:

- a) a polynucleotide comprising a polynucleotide sequence of SEQ ID NO:22,
- b) a polynucleotide comprising a naturally occurring polynucleotide sequence having at least 70% sequence identity to a polynucleotide of SEQ ID NO:22, said polynucleotide encoding a polypeptide that stimulates DnaK ATPase activity,
- c) a polynucleotide complementary to a),
- d) a polynucleotide complementary to b), and
- e) an RNA equivalent of a)-d).

12. (Canceled)

13. (Original) A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 11, the method comprising:

- a) hybridizing the sample with a probe comprising at least 20 contiguous nucleotides comprising a sequence complementary to said target polynucleotide in the sample, and which probe specifically hybridizes to said target polynucleotide, under conditions whereby a hybridization complex is formed between said probe and said target polynucleotide or fragments thereof, and
- b) detecting the presence or absence of said hybridization complex, and, optionally, if present, the amount thereof.

14. (Canceled)

15. (Original) A method for detecting a target polynucleotide in a sample, said target polynucleotide having a sequence of a polynucleotide of claim 11, the method comprising:

- a) amplifying said target polynucleotide or fragment thereof using polymerase chain reaction amplification, and
- b) detecting the presence or absence of said amplified target polynucleotide or fragment thereof, and, optionally, if present, the amount thereof.

16. (Currently Amended) A composition comprising ~~an effective amount of a~~ a polypeptide of claim 1 and a pharmaceutically acceptable excipient.

17. (Previously Presented) A composition of claim 16, wherein the polypeptide comprises an amino acid sequence of SEQ ID NO:11.

18-24. (Canceled)

25. (Withdrawn) A method of screening for a compound that specifically binds to the polypeptide of claim 1, said method comprising the steps of:

- a) combining the polypeptide of claim 1 with at least one test compound under suitable conditions, and
- b) detecting binding of the polypeptide of claim 1 to the test compound, thereby identifying a compound that specifically binds to the polypeptide of claim 1.

26. (Withdrawn) A method of screening for a compound that modulates the activity of the polypeptide of claim 1, said method comprising:

- a) combining the polypeptide of claim 1 with at least one test compound under conditions permissive for the activity of the polypeptide of claim 1,
- b) assessing the activity of the polypeptide of claim 1 in the presence of the test compound, and

- c) comparing the activity of the polypeptide of claim 1 in the presence of the test compound with the activity of the polypeptide of claim 1 in the absence of the test compound, wherein a change in the activity of the polypeptide of claim 1 in the presence of the test compound is indicative of a compound that modulates the activity of the polypeptide of claim 1.

27. (Canceled)

28. (Withdrawn) A method for assessing toxicity of a test compound, said method comprising:

- a) treating a biological sample containing nucleic acids with the test compound;
- b) hybridizing the nucleic acids of the treated biological sample with a probe comprising at least 20 contiguous nucleotides of a polynucleotide of claim 11 under conditions whereby a specific hybridization complex is formed between said probe and a target polynucleotide in the biological sample, said target polynucleotide comprising a polynucleotide sequence of a polynucleotide of claim 11 or fragment thereof;
- c) quantifying the amount of hybridization complex; and
- d) comparing the amount of hybridization complex in the treated biological sample with the amount of hybridization complex in an untreated biological sample, wherein a difference in the amount of hybridization complex in the treated biological sample is indicative of toxicity of the test compound.

29. (Withdrawn) A microarray wherein at least one element of the microarray is a polynucleotide of claim 3.

30. (Withdrawn) A method of generating an expression profile of a sample which contains polynucleotides, the method comprising:

- a) labeling the polynucleotides of the sample,

- b) contacting the elements of the microarray of claim 29 with the labeled polynucleotides of the sample under conditions suitable for the formation of a hybridization complex, and
- c) quantifying the expression of the polynucleotides in the sample.

31. (Previously Presented) An isolated polynucleotide consisting of at least 60 contiguous nucleotides of a polynucleotide of claim 11.

32. (Withdrawn) A method of screening a compound for effectiveness in altering expression of a target polynucleotide, wherein said target polynucleotide comprises a sequence of claim 3, the method comprising:

- a) exposing a sample comprising the target polynucleotide to a compound, under conditions suitable for the expression of the target polynucleotide,
- b) detecting altered expression of the target polynucleotide, and
- c) comparing the expression of the target polynucleotide in the presence of varying amounts of the compound and in the absence of the compound.